The discrepancies between the text and the figures are unfortunate and need explanation.

THE ANTS OF GUAM.

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Dr. L. O. Howard has kindly sent me for identification a collection of ants from Guam, the most important of the Ladrones or Marianne Islands. This collection, made, apparently with considerable care, by Mr. David T. Fullaway, of the Hawaiian Experiment Station, is sufficiently extensive to show that the ant-fauna of the little island is made up very largely of the "tramp" species that occur on the other small volcanic Pacific islands such as those of the Society and Hawaiian groups. Only two forms, a subspecies of *Camponotus reticulatus* Roger and a variety of *Prenolepis minutula* Forel, are new to science. Most of the others are well-known tropicopolitan or paleotropical forms. The various species, subspecies and varieties are enumerated in the following list:

1. Ponera punctatissima Roger subsp. schauinslandi Emery.

A single winged female, agreeing very closely with specimens of the typical *punctatissima* sent me by Mr. Horace S. J. Donisthorpe from the hot-houses of Kew, England. This specimen is, however, not quite 3 mm. long and has the petiolar node somewhat more attenuated above than in the typical *punctatissima* and the mandibles more slender as in the subsp. *jugata* Forel. In all these respects the Guam specimen agrees with the subsp. *schauinslandi* described by Emery (Zool. Jahrb. Abth. f. Syst., XII, 1899, p. 438) from the Island of Laysan. It thus appears that the species, originally taken in the hot-houses of Europe or out of doors only in the southern portion of that continent and in the Canary Islands, has a wide distribution in the warmer parts of the Old World.

2. Platythyrea sp.

A single male specimen, evidently belonging to this genus but not referable to any of the Malayan species, which have been described from worker specimens only.

3. Odontomachus hæmatoda L.

Seven workers and a winged female, all of rather small size (8–9 mm.), but in other respects hardly differing enough from the typical form of the species to be described as representatives of a distinct subspecies or variety.

4. Cremastogaster biroi Mayr.

A single worker closely resembling Indian specimens of this species in my collection.

5. Monomorium destructor Jerdon.

Six workers and four deälated females. This species is widely distributed through the Indomalayan and West Indian regions.

6. Monomorium floricola Jerdon.

Several workers, females and males. The females are wingless and subergatoid as I have shown to be the case in West Indian specimens of this tropicopolitan ant.

7. Cardiocondyla emeryi Forel.

A worker and male. This species is also widely distributed, occurring in the West Indies, India, Madagascar and Palestine.

8. Solonopsis geminata Fabr. subsp. rufa Jerdon.

Numerous workers and males. This is the paleotropical form of the well-known "fire ant," originally described from tropical America and in this region presenting many different subspecies and varieties. It is unquestionably this species to which Safford refers in his volume on the useful plants of Guam[1] when he says: "These little creatures, when out on foraging expeditions, travel in lines and sting every animal that crosses their path. Sometimes young chickens are killed by them. They are common in houses, and it is not unusual on turning in at night to find a line of them crossing the bed."

9. Pheidole javana Mayr.

Two soldiers and two workers of the typical form of the species, which seems to have a wide distribution in the Indomalayan region.

10. Pheidole sp.

A single small, black worker with densely punctate head and thorax, not accompanied by the soldier which alone would permit of more accurate identification.

[1] The Useful Plants of the Island of Guam. Contrib. U. S. Nat. Mus., Vol. IX, 1905, p. 92.

11. **Pheidole sp.**

Four males representing two species, possibly the two preceding.

12. **Tetramorium guineense Fabr.**

Numerous workers and deälated females. A common tropicopolitan ant.

13. **Triglyphothrix obesa Ern. André.**

Two winged females, which agree very closely with the description of workers from India and are a little darker in color than three deälated females of the var. *australis* Forel in my collection.

14. **Tapinoma melanocephalum Fabr.**

Two workers. A common tropicopolitan species.

15. **Technomyrmex albipes F. Smith.**

Several workers and deälated females of this form which is widely distributed through Madagascar, southern Asia and the Pacific islands and is evidently tending to become tropicopolitan.

16. **Plagiolepis longipes Jerdon.**

Numerous workers and males and two females. This is also a widely distributed species in southern Asia and the Pacific Islands and has been taken in western Mexico.

17. **Prenolepis minutula Forel subsp. atomus Forel var. fullawayi, new var.**

A number of workers agree very closely with cotypes of the typical *minutula* of Australia in my collection and with Forel's description of the subsp. *atomus* from Ralum in the Bismarck Archipelago, except in color. This is dark brown throughout, instead of yellow, with the exception of the mandibles and tarsi, which are yellow. The head is shaped like that of *atomus*, being as broad in front as behind, and the third funicular joint is scarcely perceptibly longer than broad. The pilosity and pubescence are as well developed as in the typical *minutula*.

18. **Prenolepis bourbonica Forel.**

Four workers and a male of this species, which is known also from India, the Island of Reunion, Hawaii and the Nicobar, Cargados and Chagos Islands.

19. **Prenolepis longicornis Fabr.**

Several workers and females. A common tropicopolitan species of Old World origin, known in tropical America as the "crazy ant."

20. Camponotus maculatus Fabr. subsp. chloroticus Emery.

I refer to this subspecies several workers, males and females. Emery cites it from New Guinea, Tonga, New Britain and the Nicobar Islands, and Forel cites it from the Bismarck Archipelago, so that it is, in all probability, widely distributed among the islands of the Pacific. *C. chloroticus* is very closely related to the subsp. *pallidus* F. Smith and *subnudus* Emery.

21. Camponotus reticulatus Roger subsp. fullawayi new subsp.

Worker Major.—Length 5–5.5 mm.

Head subrectangular, excluding the mandibles a little longer than broad, a little narrower in front than behind, with nearly straight sides and feebly excised posterior border; convex above and posteriorly, obliquely flattened in front. Eyes rather large, behind the middle of the head. Frontal area distinct, triangular; frontal carinæ subparallel, feebly sigmoidal, not diverging behind. Clypeus flattened, subrectangular, a little longer than broad, as broad behind as in front, feebly carinate and with a straight, indistinctly crenulate anterior border, slightly notched on the sides. Mandibles convex, with 5 subequal teeth. Antennal scapes terete, curved, enlarged towards their tips, extending about twice their diameter beyond the posterior corners of the head. Thorax above slightly convex, with very distinct promesonotal and mesoepinotal sutures, the latter somewhat deeper than the former and occupying the region of the obsolete metanotum. Epinotum with subequal base and declivity, the former in profile straight, the latter distinctly concave below. Seen from above the thorax has straight sides which converge gradually towards the narrow and laterally compressed epinotum; the pronotum is broader than long, the mesonotum as long as broad, the epinotum half again as long as broad. Petiole inclined forward, compressed anteroposteriorly, with blunt, entire and rounded border, slightly convex anterior and flat posterior surfaces. Gaster elongate elliptical, as long as the thorax. Legs rather long and robust.

Mandibles shining, finely punctate. Remainder of body subopaque, except the cheeks, legs and petiole which are more shining. Head and thorax densely punctate, the punctures on the head being larger than those on the thorax. Clypeus, cheeks, front and pronotum also with a few shallow, scattered foveolæ. Gaster finely, transversely striolate and with minute scattered piligerous punctures. The latter are also present on the scapes and legs.

Hairs sordid white, moderately long and sparse, partly erect or suberect and partly appressed on the head, thorax and gaster; short and appressed on the scapes and legs except at the tips of the scapes and femora where they are longer and erect. Petiolar border with at least 4 erect hairs on each side.

Black; mandibles, except their teeth, antennæ, anterior borders of cheeks and legs, including the coxæ, testaceous; tips of scapes infuscated; fore coxæ with a large brown spot at the base. Gastric segments each with the posterior border broadly yellow and with a golden reflection.

Worker Minor.—Length 3.5 mm.

Closely resembling the major worker in sculpture, pilosity and color and in the form of the thorax, petiole and gaster. Head much smaller, more elongate and more rounded behind the eyes, which are rather large and convex. Mandibles less convex and with more pointed tips.

Described from one minor and five major workers.

This ant is here somewhat doubtfully attached to *C. reticulatus* Roger which is represented by a number of described subspecies in the Indomalayan and Australian regions. I have, however, been unable to refer it to any of the latter, of which I have seen specimens or descriptions. It is smaller and more opaque than the subsp. *yerburyi* Forel of India and *mackayensis* Forel of Queensland, the head is differently colored and the pale margins of the gastric segments are much broader. It is more closely allied to the subsp. *bedoti* Emery, but Emery does not mention the broad gastric bands and the epinotum of his form is described and figured as having a distinct sellate impression at the base, the petiole is thicker and the erect hairs on the petiole and epinotum are much less numerous. *C. fullawayi* also resembles the subsp. *motschulskii* of Ceylon, but this form, to judge from Emery's very brief description, is more heavily sculptured and more opaque. *C. ominosus* Forel of Ceylon and *C. weismanni* Forel of the Bismarck Archipelago seem also to be closely allied but distinct species.

CONTRIBUTION TO AN ANNOTATED LIST OF LONG ISLAND INSECTS.

By CHRIS. E. OLSEN,

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Order HEMIPTERA.

Suborder **Heteroptera.**

Family PENTATOMIDÆ.

Subfamily SCUTELLERINÆ.

1. Tetyra bipunctata Fab.

Bayshore, VII (Ol.), Pinelawn, VI [(Wh.) nymph], Promised Land (Ds. and Eng.), in the last grove of Pines on the Island (Ds.). Reported from Maryland, Washington, D. C., Texas, Mexico and L.